

Year 5 Science Steps – Tracking ladder

Working Scientifically	
I can plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.	
I can take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.	
I can record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar charts and line graphs.	
I can use test results to make predictions to set up further comparative and fair tests.	
I can talk about and present findings from enquiries, including conclusions, casual relationships and explanations of how reliable the information is.	
I can identify scientific evidence that has been used to support or refute ideas or arguments.	
Animals, including humans	
I can describe the changes as humans develop to old age.	
Earth and space	
I can describe the movement of the Moon relative to the Earth.	
I can describe the Sun, Earth and Moon as approximately spherical bodies	
I can explain day and night and the apparent movement of the sun across the sky using the idea of the Earth's rotation.	
Forces and magnets	
I can explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object	
I can demonstrate the effects of air resistance, water resistance and friction, that act between moving surfaces	
I can show that some mechanisms including levers, pulleys and gears, allow a smaller force to have a greater effect.	
Living things and their habitats	
I can describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird	
I can describe how some animals and plants reproduce	

Materials	
I can compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets	
I can explain that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from solution.	
I can use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating	
I can give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic	
I can demonstrate that dissolving, mixing and changes of state are reversible changes.	
I can explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.	